

CLAIMS

What is Claimed is:

Claim 1. An engine oil level monitoring and replenishment system for use with an internal engine having an oil sump including:

- a sump sensor associated with the sump to continuously measure the oil level;
- a reservoir for holding a quantity of oil for use in replenishing the sump, the reservoir;
- a valve means associated with the reservoir, the valve means being responsive to signals from the sensing means to add oil to the sump from the reservoir;
- a reservoir sensor which measures the oil level in the reservoir;
- a warning circuit interactive with the reservoir sensor and responsive to lowered oil level in the reservoir to generate a signal to a drivers station, said reservoir sensor being responsive to the addition of oil to generate a second signal when the reservoir has been filled to the desired level to indicate filling should cease; and
- a warning light electrically connected to the warning circuit responsive to the signal from said circuit to indicate that the oil reservoir has reached a critical level.

Claim 2. An engine oil level monitoring and replenishment system for use with an internal engine having an oil sump with an inlet for adding replenishment oil including:

- a float located within the sump the float having an activating arm attached thereto the activating arm being attached to the first end of a pivoting arm, the float being in contact with the oil in the sump and responsive to the oil level to continuously measure the oil level;

a reservoir for holding a quantity of oil for use in replenishing the stump, the reservoir having an outlet;

a valve means associated with the reservoir, the valve means having its intake fluidly connected to the reservoir outlet and its output connected to the sump inlet, the valve means being connected to a second end of the pivoting arm so that as the pivoting arm is moved by the action of the float, the valve opens to allow oil from the reservoir to enter the valve and exit into the sump;

a reservoir float located within the reservoir, the reservoir float having a push rod attached thereto the push rod being in contact with a first end of a vertically oriented s-shaped member so that movement of the reservoir float will move the s-shaped member a similar distance, the reservoir float being in contact with the oil in the sump and responsive to the oil level to continuously measure the oil level the reservoir;

a low oil switch attached to the reservoir the second end of the s-shaped member being located above the switch so that vertical movement of the s-shaped member will activate the switch in response, the switch having an associated warning circuit interactive with the switch and responsive to lowered oil level in the reservoir to generate a signal;

a first warning light electrically connected to the warning circuit and responsive to the signal from said circuit to indicate that the oil reservoir has reached a critical level;

a fill level switch located above the low oil switch the fill level switch attached to the reservoir above the low oil switch with the second end of the s-shaped member being located between the low oil switch and the fill switch above the switch so that vertical movement of the s-shaped member will activate the fill level switch in response to the addition of oil to the

reservoir, the switch having an associated circuit interactive with the switch and responsive to raised oil level in the reservoir to generate a signal; and

a full level indicator light electrically connected to the fill level circuit and responsive to the signal from said circuit to indicate that the oil reservoir has reached the desired fill level.